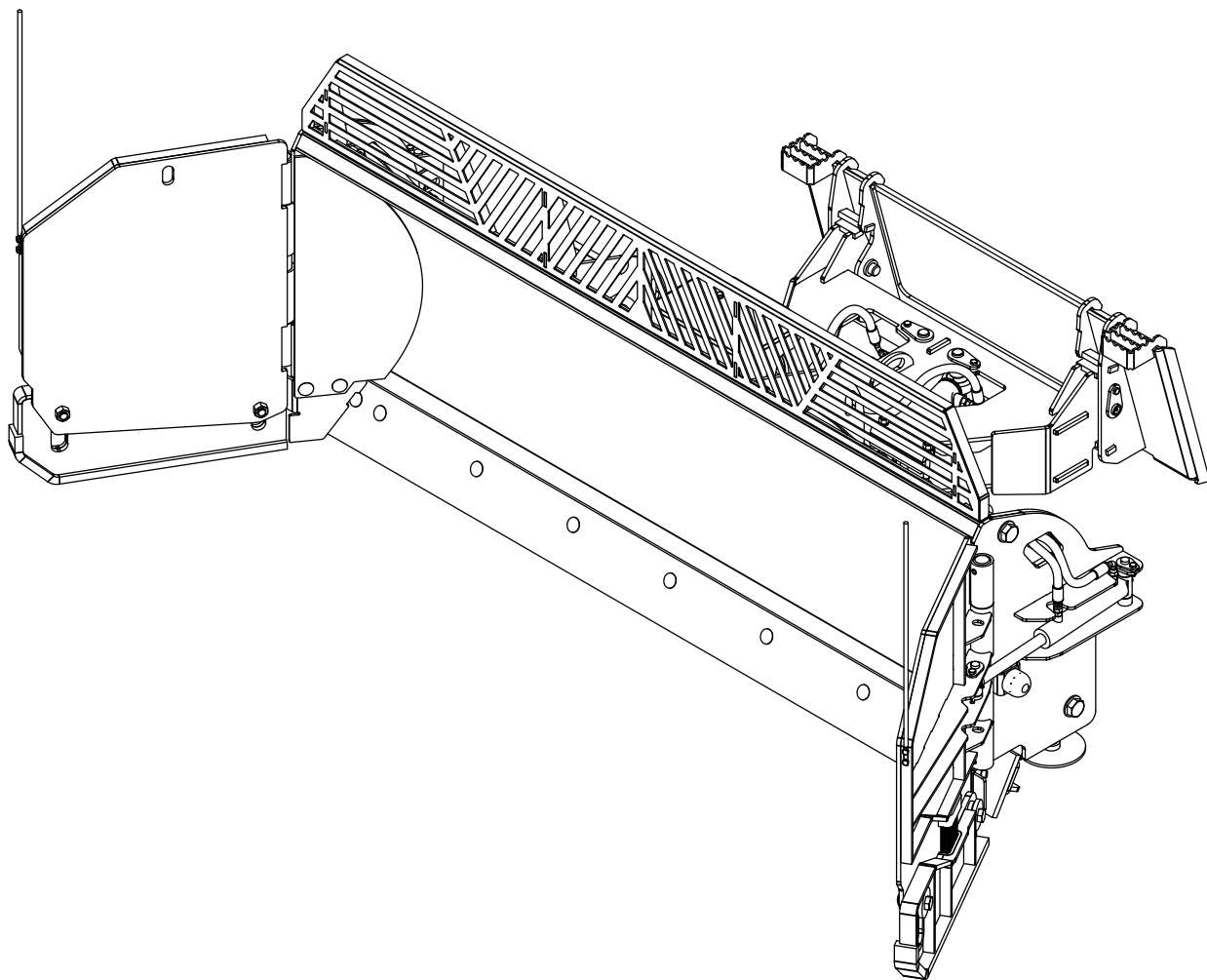


ERSKINE®

ATTACHMENTS



SNOW BLADE HYDRAULIC WING 3F MODELS 84 & 108

Operator's Manual

Maintenance & Parts Information



Read this Manual Before Use

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NOTE: Write your serial number for your attachment in the spaces below. Always refer to this serial number when calling for services parts.

Serial Number

Attachment Dealer

Address

Phone Number

Contact

NOTE: Erskine Attachments LLC reserves the right to make improvements in design or changes in specifications at any time without notice and without incurring any obligations to install them on units previously sold.

SAFETY

DO NOT use or perform maintenance on this machine until this manual has been read and understood. In addition, read the Operation and Maintenance Manual(s) pertaining to the attachment and the attachment carrier (“Loader”).

The user is responsible for inspecting the machine daily, and for having parts repaired or replaced when continued use of the machine would cause damage, excessive wear to other parts or make the machine unsafe for continued operation.

If an operating procedure, tool device, maintenance or work method not specifically recommended is used; you must satisfy yourself that it is safe for you and others. You must also ensure that the attachment will not be damaged or made unsafe by the procedures you choose.

Erskine Attachments LLC cannot anticipate every possible circumstance that might involve potential hazard. The safety messages found in this manual and on the machine are therefore not all inclusive

The signal words **CAUTION**, **WARNING**, or **DANGER** are used to indicate hazards.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

DANGER

Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

The word **IMPORTANT** is used in the text when immediate damage will occur due to improper technique or operation.

The word **NOTE** is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information, and other information of a supplementary nature.

SAFETY

Improper operation can cause serious injury or death.

PRE-OPERATION

- This attachment is designed for moving snow only. **NEVER** use this attachment for purposes other than intended.
- Read the operator's manual for the "Skid Steer Loader". **NEVER** allow untrained people to operate.
- Operating instructions must be given to everyone before operating this machine and at least once a year thereafter in accordance with OSHA regulations.
- **NEVER** exceed the maximum recommended input power or speed specifications for the attachment. Overpowering or over-speeding the attachment may cause personal injury and/or machine damage.
- Keep all shields, guards, and covers in place.
- Do not modify equipment or add attachments that are not approved by Erskine Attachments LLC.
- Use adequate safety warning lights and devices as required by local regulations. Obey all local laws and regulations regarding machine operation on public property.

OPERATION

- Always wear eye protection that meets z87.1 or use with a loader enclosure that provides similar protection.
- Hydraulic connections may be hot after use. Use gloves if connecting or disconnecting after use.
- Check and be sure all operating controls are in neutral before starting the engine.
- Keep people away from loader and attachment when in use. This attachment has mowing parts.

OPERATION (continued)

- **NEVER** operate near embankments or terrain that is so steep that rollover could occur.
- Always stay in the operator position when using the attachment.
- Before leaving the operators position, disengage hydraulic drive, lower the attachment to rest flat on the ground, stop engine, set park brake, and wait for all motion to stop.
- **NEVER** place hands near attachment or clear debris while engine is running.

AVOID HIGH PRESSURE FLUIDS HAZARD

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving the pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, **NOT BODY PARTS**, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when servicing or performing maintenance on hydraulic systems.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

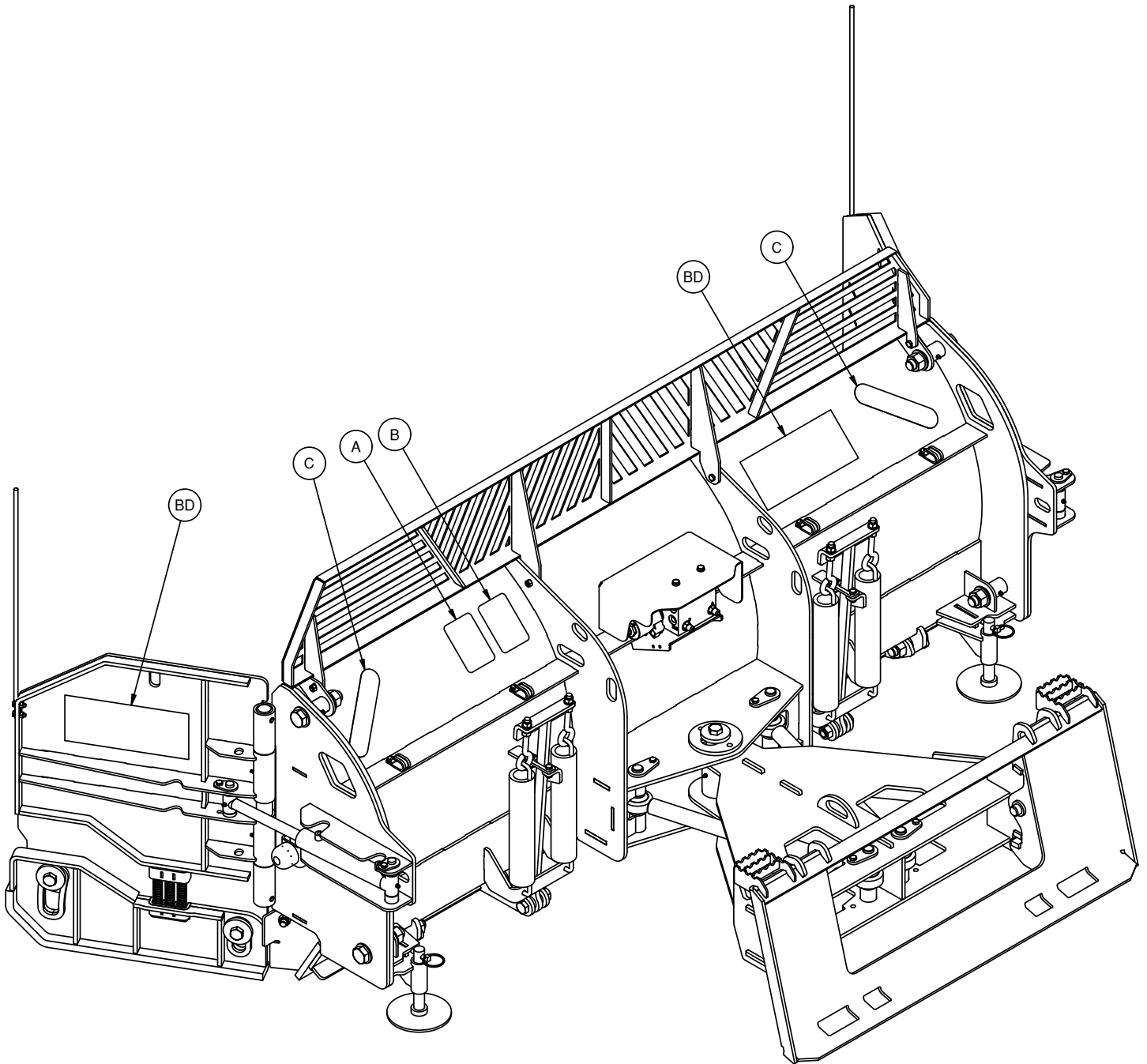
MAINTENANCE

- **NEVER** make adjustments, lubricate, clean, or perform any service on the machine while it is in operation.
- Make sure the attachment is serviced on a daily basis. Improper maintenance can cause serious injury or death in addition to damage to the attachment and/or your equipment.

DECAL INFORMATION

Serial Number Location:

It is important to refer to the serial number of your attachment when making repairs or ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use different procedures in doing a specific operation. Please see below for Serial Plate location.



DECAL INFORMATION

A



Part number: 200001
 Location: Back of moldboard, LH side
 Quantity: 1

B



Part number: 203234
 Location: Back of moldboard, LH side
 Quantity: 1

C



Part number: 300245 (Yellow Reflector)
 Location: Back of moldboard, each end
 Quantity: 2

BD



Brand Decal: 320326 (Large)
 Location: Back of moldboard, RH side
 Outside of each wing
 Quantity: 3

Safety Decals Locations:

The locations of the safety decals are shown. If these decals are missing, damaged, or painted over they must be replaced. Call Erskine Attachments LLC (218-435-4045) for replacement decals.

SET-UP ASSEMBLY

Wire Harness Installation

If the loader is equipped with an attachment control package, an appropriate harness should be installed from the factory.

If the attachment was ordered with the pistol grip control harness, use the following steps to install the harness on the loader:

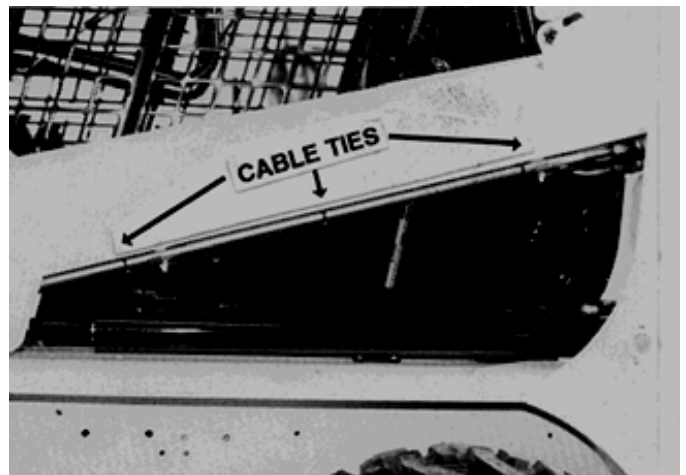
1. Install the control handle on either steering lever, whichever you prefer, with (2) hose clamps.

NOTE: The control handle bracket can be positioned several different ways. The recommended position is shown.

2. Put a cable tie around the wiring harness and the steering lever.
3. Install the wire harness receptacle bracket on the loader arm or near the hydraulic quick couplers.

NOTE: It may be necessary to make an adapter bracket in order to attach the wire harness to the loader.

4. Route the wiring harness back along the tube lines on the loader arms and fasten with cable ties.
5. Open the rear door and pull the excess wiring into the engine compartment.
6. Raise the operator cab (see loader's operator's manual for the correct procedure).



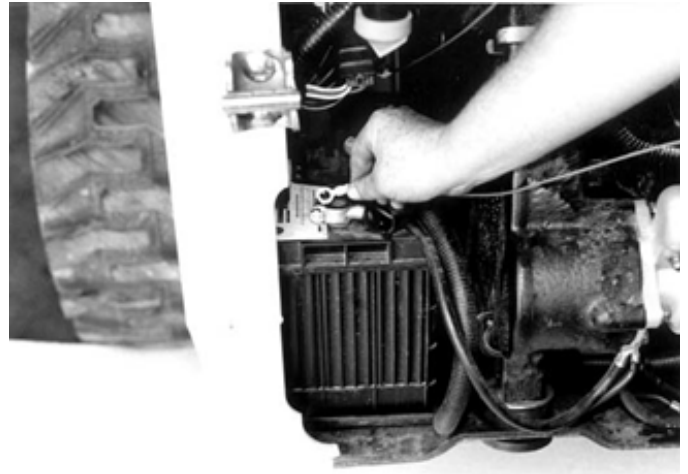
SET-UP ASSEMBLY

7. Connect the red fused wire to the positive battery terminal or to a suitable accessory wire with a minimum rating of 5 amps. Route the wiring along the loader main frame toward the front of the loader.
8. Fasten the control handle wiring harness connector to the main wiring harness connector.

IMPORTANT: Secure the wiring harness in place with plastic cable ties, making sure it is clear of extra hot areas or any moving parts on the engine or loader. Pinched, stretched, or melted wire harnesses are not covered under warranty.

9. Lower the cab (see loader's operator's manual for the correct procedure).

NOTE: Be sure the control handle wire harness is properly positioned as the cab is lowered.



MOUNTING INSTRUCTIONS

After the initial set-up assembly is completed use the following procedure to mount the attachment to the loader for user operation.

WARNING

Coupler wedges or pins must extend through holes in attachment. Levers must be fully down and locked. Failure to secure wedges or pins can allow the attachment to come off and cause injury or death.

1. Use the step, safety treads, and grab handles to get on and off the loader and attachment.
2. Sitting in the operator's seat, lower seat bar (if so equipped) and fasten the seat belt.
3. Drive the loader to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.
4. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.
5. Stop the engine and engage the park brake.
6. Secure the coupler locking mechanism that attaches the attachment to the loader.

MOUNTING INSTRUCTIONS

7. Connect the hydraulic quick couplers from the attachment to the loader.

IMPORTANT: Wipe the ends of the hydraulic quick couplers (both lead and loader) with a rag to remove any possible contamination. Contamination can cause hydraulic components to fail and is not covered under warranty.

IMPORTANT: Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and brand. Do not force the quick couplers together.

NOTE: See the loader's operator's manual for auxiliary hydraulic specifications and connection instructions.

NOTE: Attachment is shipped with 8FJX (3/4" Female JIC Swivel) fittings on the ends of the lead hoses.

8. Connect the attachment wire harness to the loader's wire harness receptacle.

9. Make sure the hoses and harness are properly routed to fit your specific loader. If the hoses and harness are not routed correctly, hoses or harness may get pinched or rub on tires. Be sure to check the hose and harness routing through the full range of intended motion of the attachment before operating it.



NOTE: More than one routing may be acceptable depending on the loader. Pick the routing that best suits your loader.

IMPORTANT: Proper hose and harness routing is the responsibility of the owner and/or operator. Pinched or stretched hoses or harnesses are not covered under warranty.

NOTE: Mounting is now complete and the attachment is ready for operation. Use reverse order of above instructions to dismount the attachment from the loader.

OPERATING INSTRUCTIONS

IMPORTANT: The snow blade is designed for moving snow only. It is not designed for shaping or grading soil.

Snow Removal

1. With the operator in the seat of the loader, the seat belt fastened, and the seat bar lowered (if so equipped), start the engine.
2. With the loader lift arms fully lowered, tilt the attachment forward until it rests on the skid shoes/cutting edge and the subframe is level (parallel with the ground).

NOTE: Keeping the subframe level ensures the attachment has the maximum flotation that it is designed for in both directions (up and down).

3. Drive the loader forward to push snow.

NOTE: The operating speed is determined by the depth and density of the snow being moved.

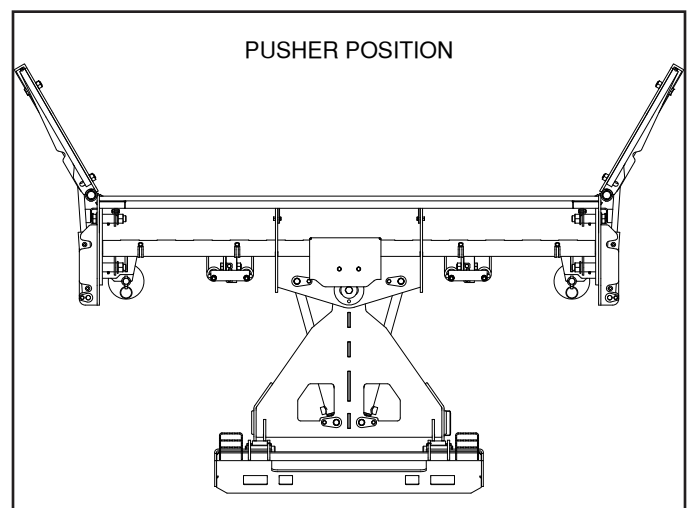
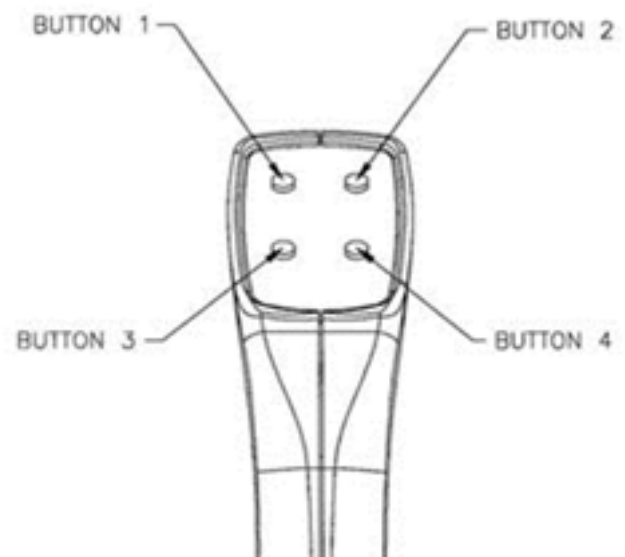
4. Use the loader lift and tilt functions to increase traction and adjust the pitch of the attachment.

Blade Position

All functions can be activated by the steering lever switches on the loader (if loader is equipped), or with the pistol grip control harness.

NOTE: Loader must have an attachment control kit installed to make use of lever switches. For steering lever function, refer to your loader's operator's manual.

1. Activate the auxiliary hydraulic circuit to angle the blade to the right. Activate the hydraulics in the opposite direction to angle the blade to the left.
2. While holding button 3, activate the auxiliary hydraulic circuit to swing the left wing forward. While holding button 3, activate the hydraulics in the opposite direction to swing the left wing backward.



OPERATING INSTRUCTIONS

3. While holding button 4, activate the auxiliary hydraulic circuit to swing the right wing forward. While holding button 4, activate the hydraulics in the opposite direction to swing the right wing backward.
4. Use these functions to set the blade in the pusher, straight, back drag, or windrowing positions as appropriate for the work being done.

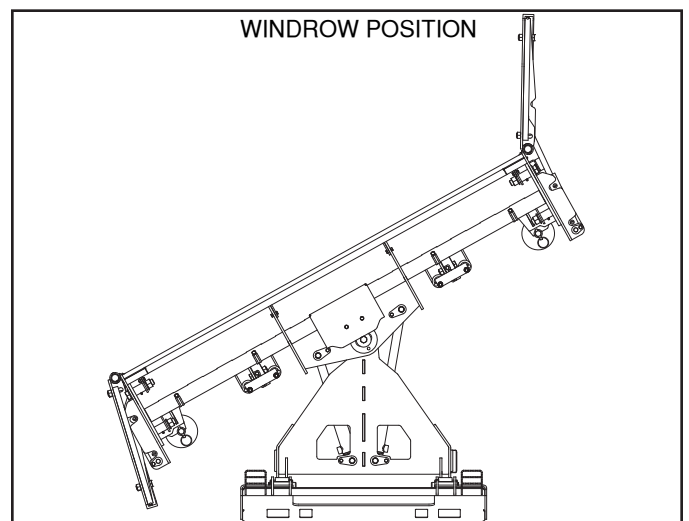
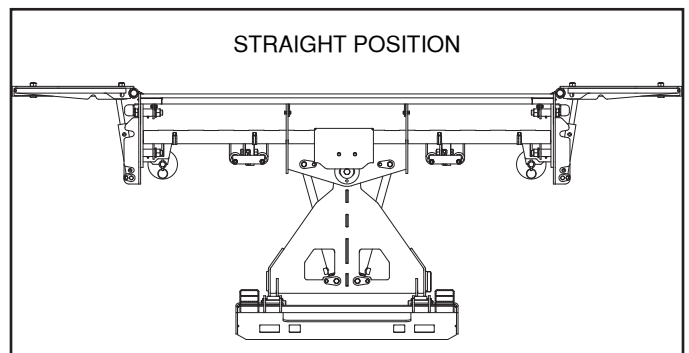
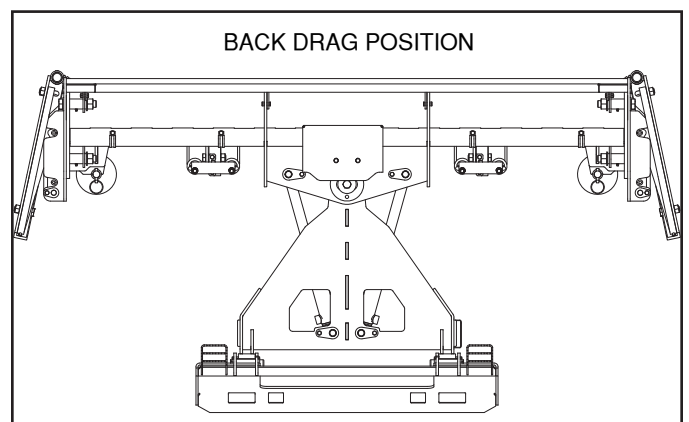
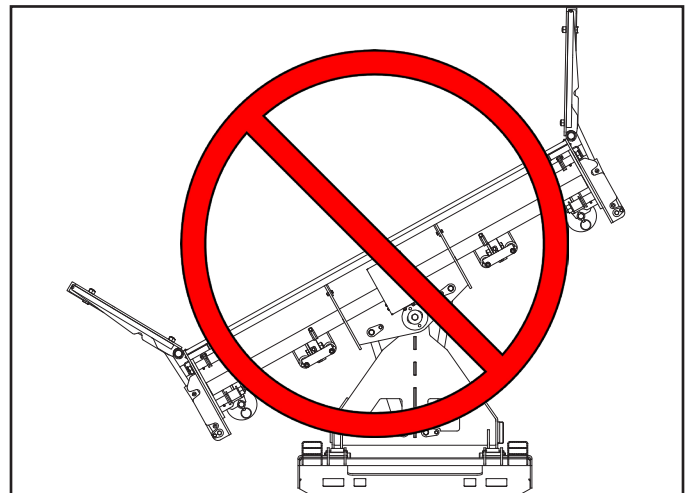
IMPORTANT: Do not operate the snow blade with the wings in the pusher position while fully angled to either side. Operating in this position prevents the attachment's built-in hydraulic relief system from functioning properly, and may cause damage to the hydraulic system if an obstruction is struck.

NOTE: The blade and wings may have to be repositioned after hard contact with a solid object or pushing hard into a heavy pile. This is normal due to the relief system designed into the valve block.

Windrowing

1. To position the blade for windrowing to one side, activate the auxiliary hydraulics to swing the blade to the desired side.
2. Swing the leading wing fully forward to cut and contain snow.
3. Swing the trailing wing to the straight position or all the way back to allow snow to roll off of the blade to that side.

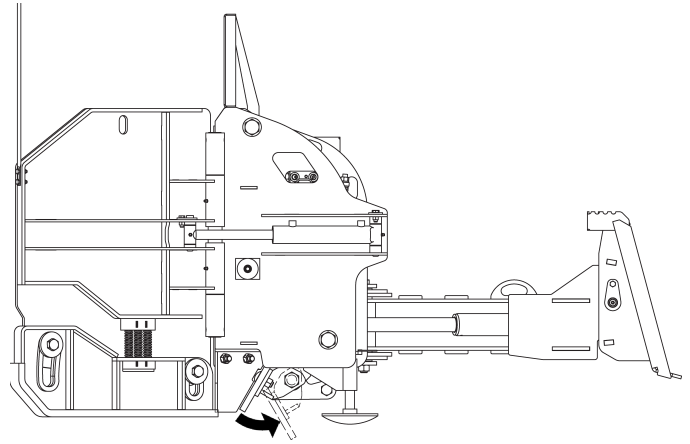
IMPORTANT: Do not operate the snow blade with the wings in the pusher position while fully angled to either side. Operating in this position prevents the attachment's built-in hydraulic relief system from functioning properly, and may cause damage to the hydraulic system if an obstruction is struck.



OPERATING INSTRUCTIONS

Trip Springs

1. The snow blade is equipped with trip springs which allow the cutting edge to trip when it strikes an obstruction. This helps protect the attachment and the obstruction from damage.
2. To reset the trip springs after striking an obstruction, raise the loader lift arms to lift the attachment slightly off of the ground, or slowly drive the loader backward a few feet.



Skid Shoe Height Adjustment

1. Raise the attachment about 1 foot off of the ground and use blocks or jack stands to securely support the attachment.
2. Remove the lynch pin from the first skid shoe, and slide the skid shoe out of the mount bushing.
3. Install spacer washers on the skid shoe to achieve the desired cutting edge height, and slide the skid shoe back into the mount bushing.
4. Store remaining spacer washers on top of the mount bushing, and install the lynch pin to secure the skid shoe and washer in place.
5. Repeat steps 2-4 for the other skid shoe. Make sure both skid shoes are set to the same height.

ROUTINE MAINTENANCE





⚠ WARNING

Lower the attachment to rest flat on the ground, shut down the engine, relieve the hydraulic pressure to the attachment, set the park brake, and wait for all motion to stop before leaving the operator's seat to perform service of any kind.

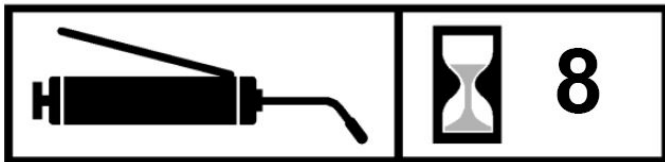
It is the operator's responsibility to make daily inspections of the loader and attachment for damage, loose bolts, fluid leaks, or anything else that could cause a potential service or safety problem. Preventive maintenance is the easiest and least expensive type of maintenance.

IMPORTANT: Bolts can loosen after initial usage. After the first hour of operation check all bolts.

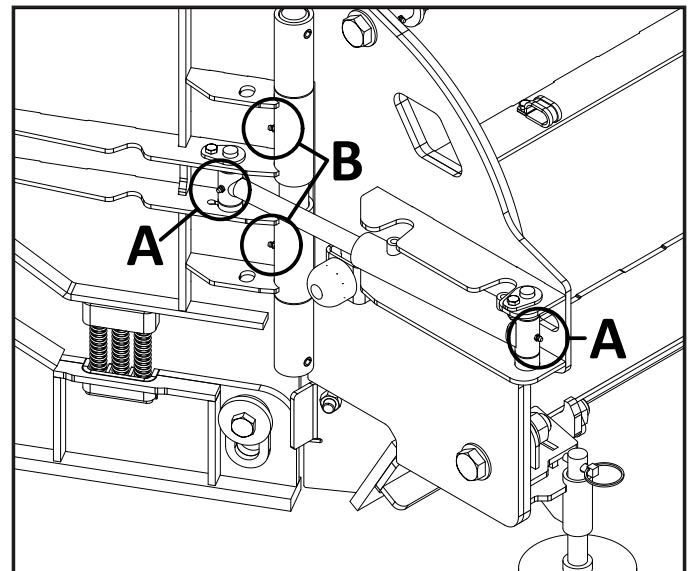
LUBRICATION

Lubrication Legend	 Multipurpose spray lube	 Multipurpose grease lube	 Multipurpose oil lube	 Intervals at which lubrication is required
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Use No. 2 lithium base gun grease when lubricating all attachment grease fittings.



Grease (4) wing cylinder grease fittings [A] and (4) wing bushing grease fittings [B] every 8 hours of operation.



TORQUE INFORMATION

Torque-Tension Relationships for SAE J429 Grade Bolts

Nominal Thread Size	SAE J429 Grade 2			SAE J429 Grade 5			SAE J429 Grade 8		
	Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque	
		K = .15	K = .20		K = .15	K = .20		K = .15	K = .20
Unified Coarse Thread Series									
1/4-20	1,300	49 in-lbs	65 in-lbs	2,000	75 in-lbs	100 in-lbs	2,850	107 in-lbs	143 in-lbs
5/16-18	2,150	101	134	3,350	157	210	4700	220	305
3/8-16	3,200	15 ft-lbs	20 ft-lbs	4,950	23 ft-lbs	31 ft-lbs	6,950	32.5 ft-lbs	44 ft-lbs
7/16-14	4,400	24	30	6,800	37	50	9,600	53	70
1/2-13	5,850	36.5	49	9,050	57	75	12,800	80	107
9/16-12	7,500	53	70	11,600	82	109	16,400	115	154
5/8-11	9,300	73	97	14,500	113	151	20,300	159	211
3/4-10	13,800	129	173	21,300	200	266	30,100	282	376
7/8-9	11,425	125	166	29,435	321	430	41,550	454	606
1-8	15,000	187.5	250	38,600	482.5	640	54,540	680	900
Unified Fine Thread Series									
1/4-28	1,500	55 in-lbs	75 in-lbs	2,300	85 in-lbs	115 in-lbs	3,250	120 in-lbs	163 in-lbs
5/16-24	2,400	112	150	3,700	173	230	5,200	245	325
3/8-24	3,600	17 ft-lbs	22.5 ft-lbs	5,600	26 ft-lbs	35 ft-lbs	7,900	37 ft-lbs	50 ft-lbs
7/16-20	4,900	27	36	7,550	42	55	10,700	59	78
1/2-20	6,600	41	55	10,200	64	85	14,400	90	120
9/16-18	8,400	59	79	13,000	92	122	18,300	129	172
5/8-18	10,600	83	110	16,300	128	170	23,000	180	240
3/4-16	15,400	144	193	23,800	223	298	33,600	315	420
7/8-14	12,610	138	184	32,480	355	473	45,855	500	668
1-12	16,410	205	273	42,270	528	704	59,670	745	995

Clamp load estimated as 75% of proof load for specified bolts.

Torque values for 1/4 and 5/16 inch series are in inch-pounds. All other torque values are in foot-pounds.

Torque values calculated from formula $T = KDF$

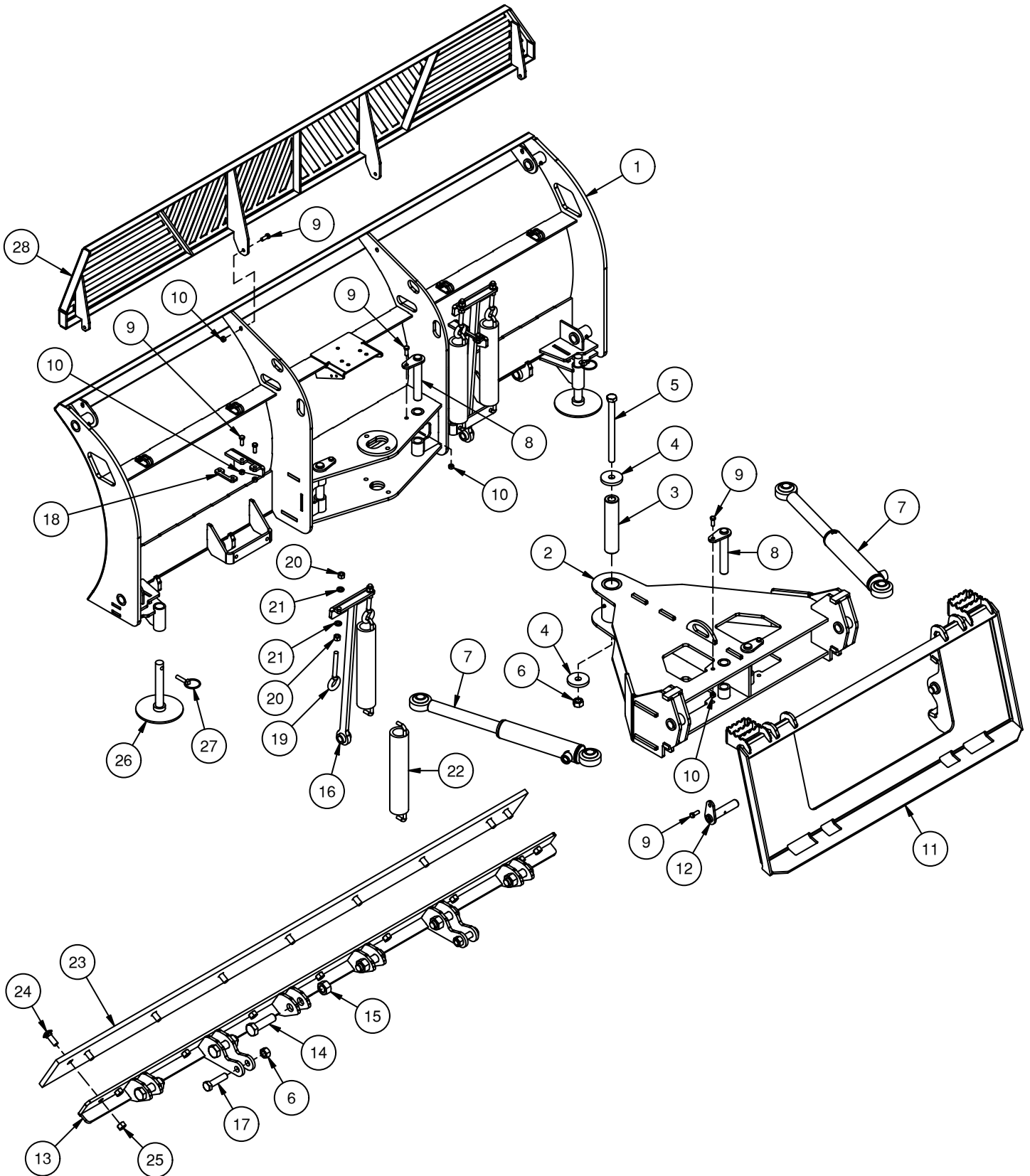
where: $K=0.15$ for "lubricated" conditions

$K=0.20$ for "dry" conditions

PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	NOTES
1	1	341801	MOLDBOARD 84 W/A	84" MODEL
	1	341802	MOLDBOARD 108 W/A	108" MODEL
2	1	341800	SUBFRAME W/A	
3	1	341894	BUSH 1.75 X .88 X 7.94	
4	2	341899	WASHER PLATE .77 X 2.75 X .38 Z	
5	1	15382	BOLT HEX 3/4 X 9-1/2 NC GR8 YZ	
6	3	37217	NUT REV LOCK 3/4 NC GR A Z	
7	REF	331379	CYLINDER 2 X 8 X 20.25 SINGLE ACT	
8	4	311307	PIN 1.00 X 6.00 W/A Z	
9	14	13105	BOLT HEX 3/8 X 1 NC GR5	84" MODEL
	16	13105	BOLT HEX 3/8 X 1 NC GR5	108" MODEL
10	12	37212	NUT REV LOCK 3/8 NC GR A Z	84" MODEL
	14	37212	NUT REV LOCK 3/8 NC GR A Z	108" MODEL
11	1	341502	MOUNT FRAME V2 W/A	
12	2	401261	PIN 1 X 4.50 GRS W/A Z	
13	1	341803	TRIPE EDGE 84 W/A	84" MODEL
	1	341804	TRIP EDGE 108 W/A	108" MODEL
14	6	13467	BOLT HEX 1 X 3-1/2 NC GR5	84" MODEL
	8	13467	BOLT HEX 1 X 3-1/2 NC GR5	108" MODEL
15	6	37219	NUT REV LOCK 1 NC GR A Z	84" MODEL
	8	37219	NUT REV LOCK 1 NC GR A Z	108" MODEL
16	2	311305	MOUNT SPRING LIFT W/A	
17	2	13365	BOLT HEX 3/4 X 3 NC GR5	
18	2	311361	BRKT SPRING LIFT HOLDER PNTD	
19	4	42264	BOLT EYE 1/2 X 4 NC	
20	8	36310	NUT HEX 1/2 NC	
21	8	33626	WASHER SPLIT LOCK 1/2	
22	4	100303	SPRING EXT 2.38 OD X 15	
23	1	341888	CUTTING EDGE 84	84" MODEL
	1	341889	CUTTING EDGE 108	108" MODEL
24	9	21891	BOLT CARR 5/8 X 1-3/4 NC GR5 Z	84" MODEL
	11	21891	BOLT CARR 5/8 X 1-3/4 NC GR5 Z	108" MODEL
25	9	37216	NUT REV LOCK 5/8 NC GR A Z	84" MODEL
	11	37216	NUT REV LOCK 5/8 NC GR A Z	108" MODEL
26	2	100301	SKID SHOE 6" STANDARD	
27	2	104432	PIN LYNCH 7/16 X 1-3/4	
28	1	341919	SPILL GUARD 84 W/A	84" MODEL
	1	341929	SPILL GUARD 108 W/A	108" MODEL

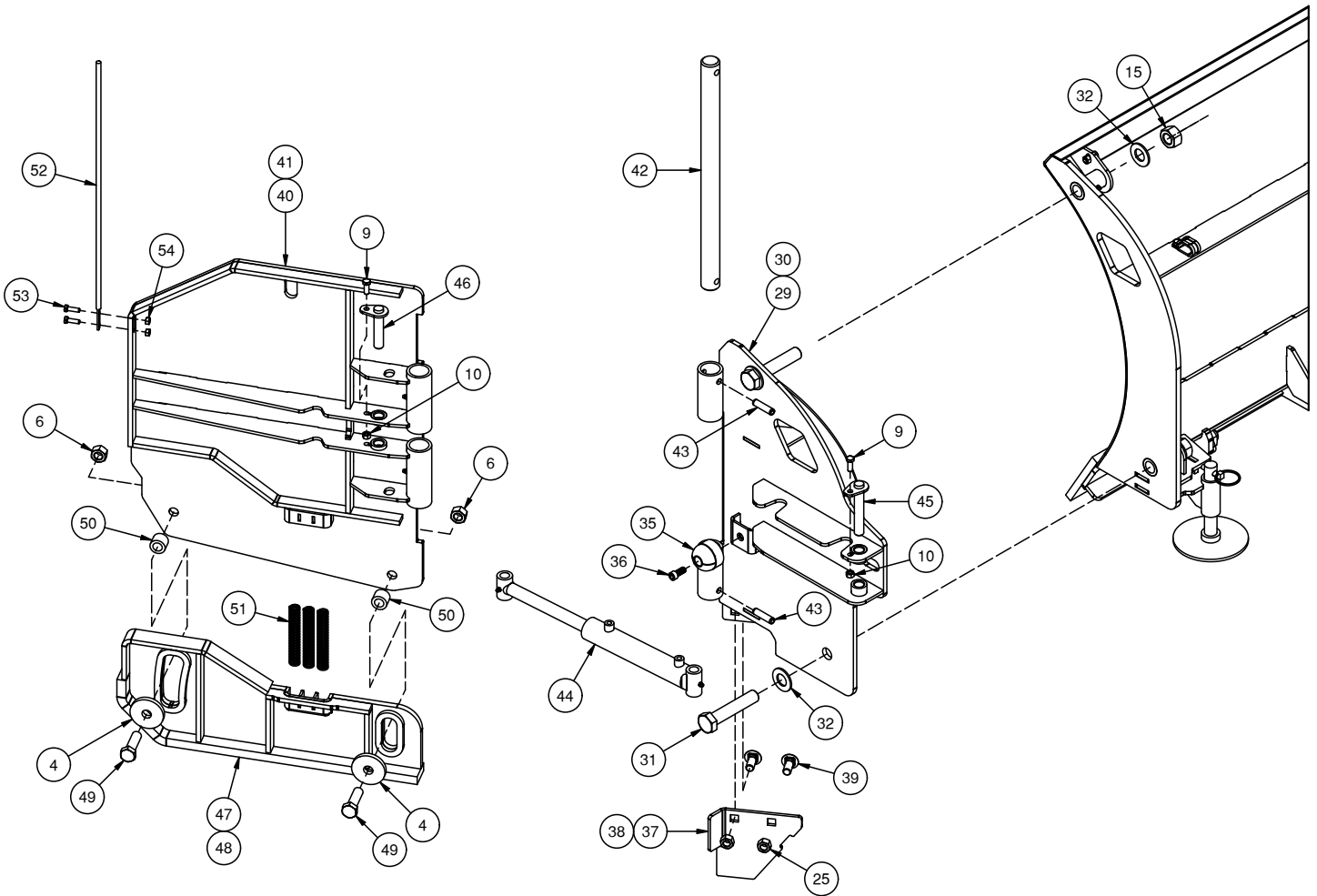
PARTS INFORMATION



PARTS INFORMATION

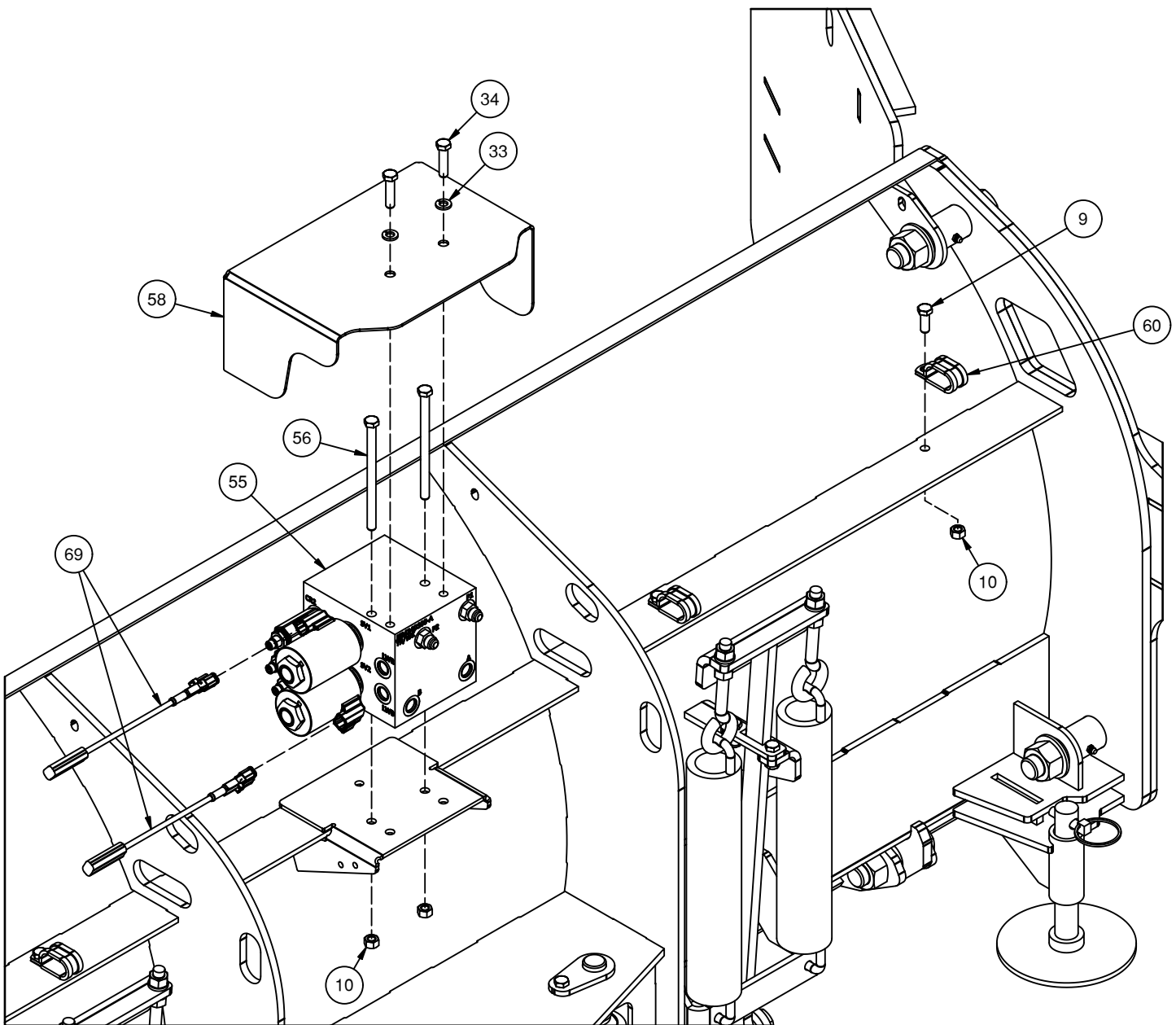
ITEM	QTY	PART NO.	DESCRIPTION	NOTES
4	4	341899	WASHER PLATE .77 X 2.75 X .38 Z	
6	4	37217	NUT REV LOCK 3/4 NC GR A Z	
9	4	13105	BOLT HEX 3/8 X 1 NC GR5	
10	4	37212	NUT REV LOCK 3/8 NC GR A Z	
15	4	37219	NUT REV LOCK 1 NC GR A Z	
25	4	37216	NUT REV LOCK 5/8 NC GR A Z	
29	1	341805	WING MOUNT LH W/A	
30	1	341806	WING MOUNT RH W/A	
31	4	13473	BOLT HEX 1 X 5 NC GR5	
32	8	33096	WASHER FLAT SAE 1	
35	2	341901	BUMPER URETHANE	
36	2	23355	BOLT SHCS 7/16 X 1 NC	
37	1	341890	BRKT CORNER LH PNTD	
38	1	341892	BRKT CORNER RH PNTD	
39	4	201452	BOLT CARR 5/8 X 1-1/2 NC GR5	
40	1	341807	WING LH W/A	
41	1	341808	WING RH W/A	
42	2	341896	PIN 1.38 X 22.00 W/HOLES Z	
43	4	64355	PIN ROLL 1/2 X 2	
44	REF	341902	CYLINDER 1.5 X 6 B-B	
45	2	341904	PIN .75 X 4.50 W/A Z	
46	2	341906	PIN .75 X 3.38 W/A Z	
47	1	341809	SKID SHOE FLOAT LH W/A	
48	1	341810	SKID SHOE FLOAT RH W/A	
49	4	15363	BOLT HEX 3/4 X 2-1/2 NC GR8 YZ	
50	4	341898	BUSH 1.25 X .77 X .94 Z	
51	6	341900	SPRING COMP .88 OD X 5.5	
52	1	100302	KIT MARKER SNOW BLADE	INCLUDES (2) MARKERS & HARDWARE
53	4	13055	BOLT HEX 5/16 X 1 NC GR5	INCLUDED WITH KIT 100302
54	4	37211	NUT REV LOCK 5/16 NC GR A Z	INCLUDED WITH KIT 100302

PARTS INFORMATION



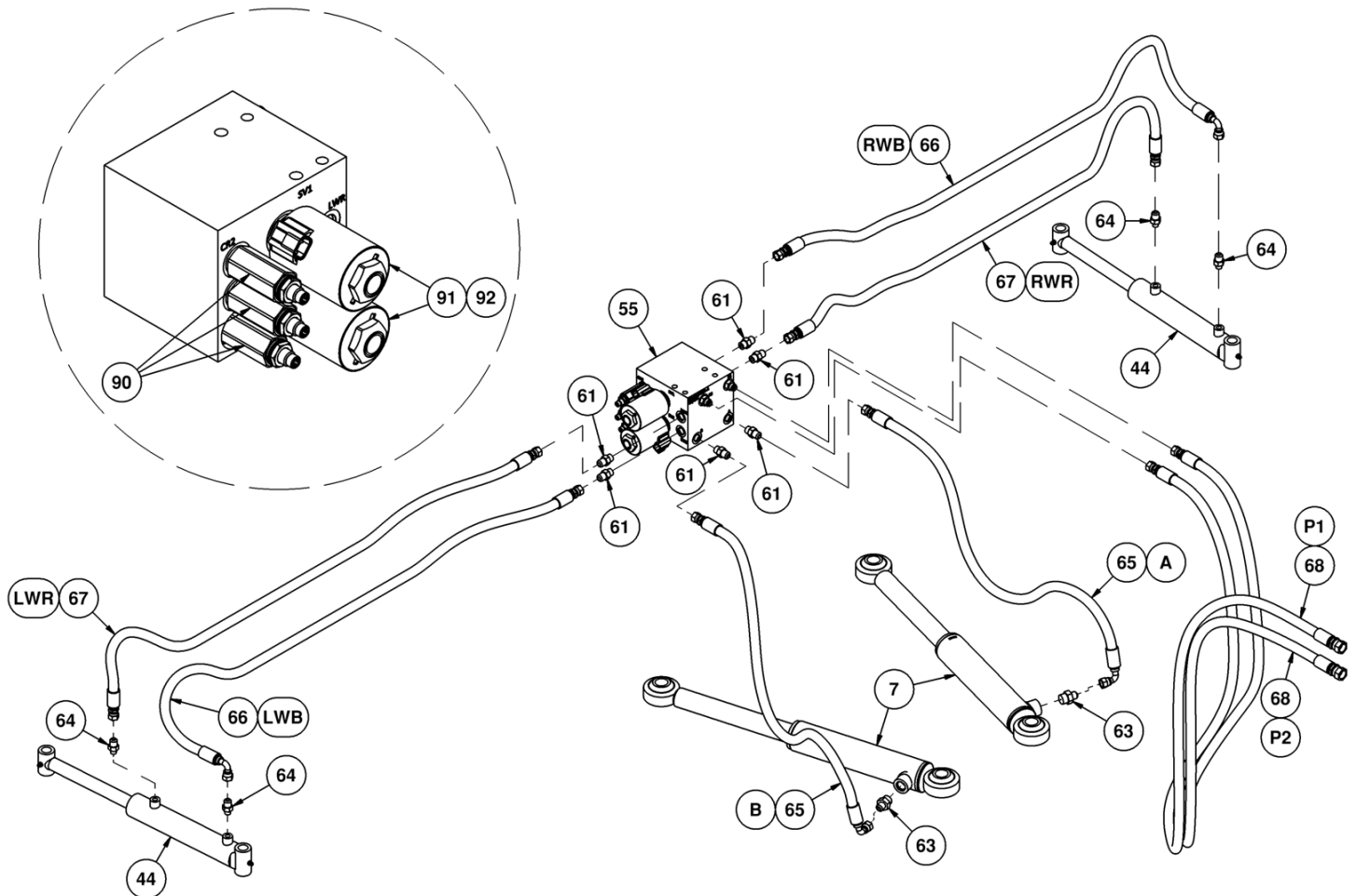
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	NOTES
9	4	13105	BOLT HEX 3/8 X 1 NC GR5	
10	6	37212	NUT REV LOCK 3/8 NC GR A Z	
33	2	103880	WASHER SPLIT LOCK 3/8	
34	2	103879	BOLT HEX 3/8 X 1-1/2 NC GR5	
55	REF	341909	VALVE ASSM SNOW BLADE HYD WING 3F	
56	2	13124	BOLT HEX 3/8 X 5-1/2 NC GR5	
58	1	341950	COVER VALVE 3F W/A	
60	4	341916	CLAMP LOOP .75 X 2-HOSE	
69	2	313499	HRN ADPT METPAK TO DEUTSCH	



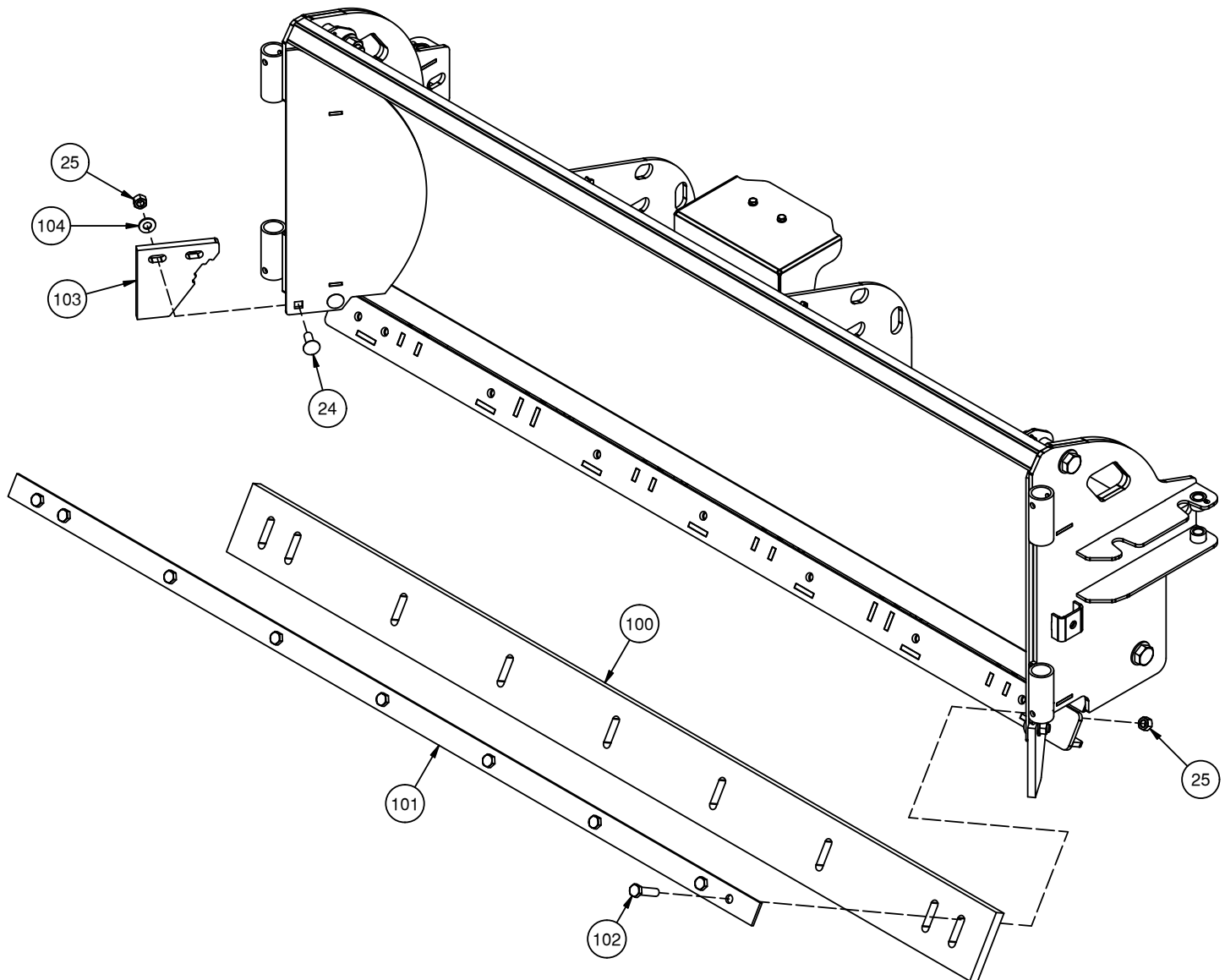
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	NOTES
7	2	331379	CYLINDER 2 X 8 X 20.25 SINGLE ACT	
44	2	341902	CYLINDER 1.5 X 6 B-B	
55	1	341909	VALVE ASSM SNOW BLADE HYD WING 3F	
61	6	311673	ADPT STR 6MB-6MJ	
63	2	300404	ADPT RESTRICTOR STR 8MB-6MJ .030	
64	4	330918	ADPT STR 4MB-6MJ	
65	2	341913	HOSE 3/8 X 35 6FJX-6FJX-90	
66	2	341914	HOSE 3/8 X 52 6FJX-6FJX-90	
67	2	341915	HOSE 3/8 X 48 6FJX-6FJX	
68	2	341912	HOSE 3/8 X 84 6FJX-8FJX	
90	3	341948	VALVE RELIEF BI DIRECT 3000	SERVICE PARTS ONLY
91	2	341947	VALVE SOLENOID SNOW BLADE	SERVICE PARTS ONLY
92	2	341940	COIL VALVE 12V ECOIL #12 DEUTSCH DIODE	SERVICE PARTS ONLY



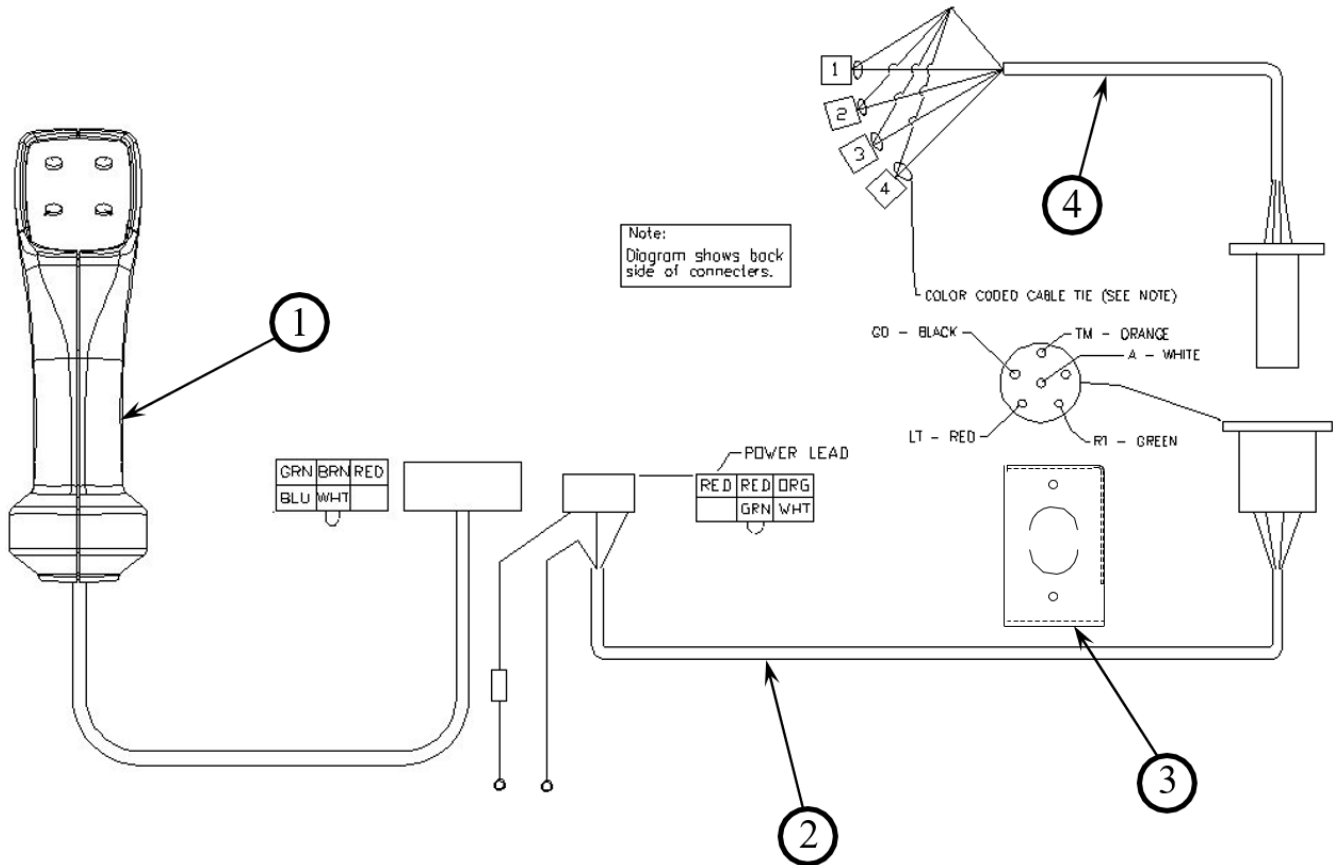
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	NOTES
	1	341932	PKG CUT EDGE URE HSB 84" WING SB	OPTIONAL PACKAGE
	1	341935	PKG CUT EDGE URE HSB 108" WING SB	OPTIONAL PACKAGE
24	4	21891	BOLT CARR 5/8 X 1-3/4 NC GR5 Z	
25	13	37216	NUT REV LOCK 5/8 NC GR A Z	84" MODEL
	15	37216	NUT REV LOCK 5/8 NC GR A Z	108" MODEL
100	1	300096	CUTTING EDGE URE 84" HSB	84" MODEL
	1	300098	CUTTING EDGE URE 108" HSB	108" MODEL
101	1	300100	PLATE BACKING HSB .25 X 2 X 84 W/H	84" MODEL
	1	300102	PLATE BACKING HSB .25 X 2 X 108 W/H	108" MODEL
102	9	13313	BOLT HEX 5/8 X 2-1/2 NC GR5	84" MODEL
	11	13313	BOLT HEX 5/8 X 2-1/2 NC GR5	108" MODEL
103	2	341933	CUTTING EDGE URE CORNER	
104	4	33090	WASHER FLAT SAE 5/8	



PARTS INFORMATION

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
	1	315128	COMPLETE HARNESS -GENERIC	SHOWN
1	1	315110	PISTOL GRIP	HANDLE ASSEMBLY W/ HARNESS
2	1	315126	LOADER HARNESS	
3	1	202489	RECEPTACLE BRACKET	FOR LOADER HARNESS
4	1	315127	ATTACHMENT HARNESS	

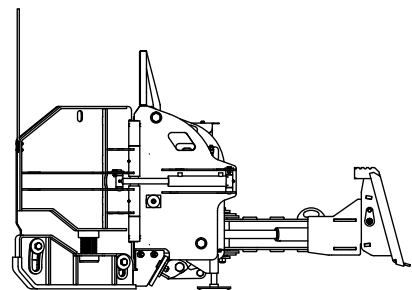
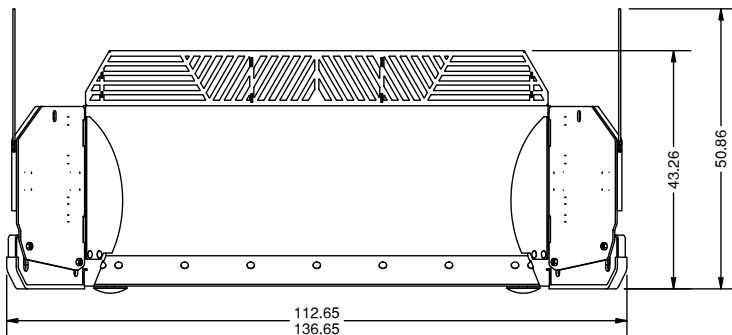
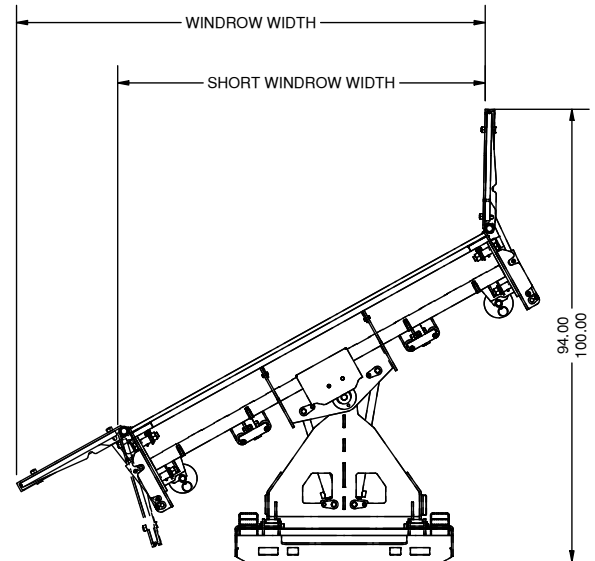
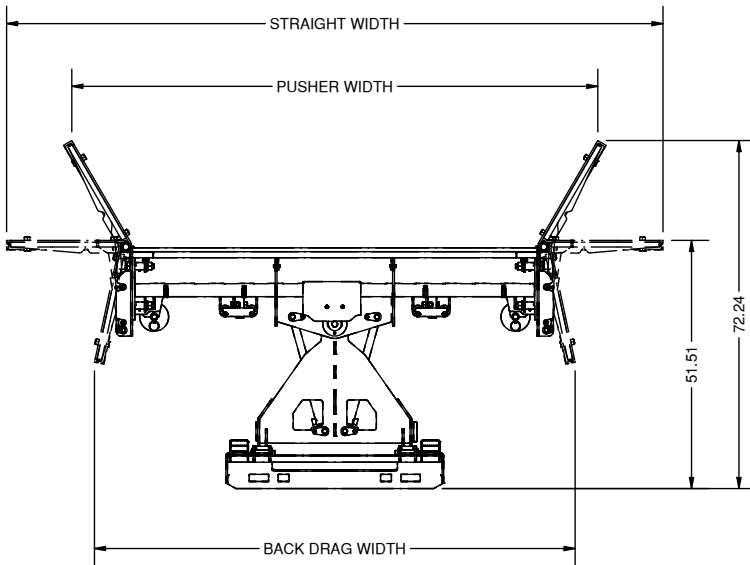


OPTIONAL HARNESSES (NOT SHOWN)

PART NUMBER	DESCRIPTION	NOTE
315090	HARNESS 14-PIN UNIVERSAL	FOR BOBCAT® LOADERS
315152	HARNESS 14-PIN UNIVERSAL	FOR CASE® & NEW HOLLAND® LOADERS
320084	HARNESS 14-PIN UNIVERSAL	FOR JOHN DEERE® LOADERS PRIOR TO D SERIES
320647	HARNESS 14-PIN UNIVERSAL	FOR JOHN DEER® EH LOADERS
300444	HARNESS 14-PIN UNIVERSAL	FOR KUBOTA® LOADERS
200008	HARNESS 8-PIN	FOR CATERPILLAR® A SERIES LOADERS
315153	HARNESS 8-PIN	FOR ASV® LOADERS
315339	HARNESS 8-PIN	FOR CATERPILLAR® B SERIES HIGH FLOW LOADERS

GENERAL SPECS

MODEL	SNOW BLADE HYD WING 84 3F	SNOW BLADE HYD WING 108 3F
MOLDBOARD WIDTH	84"	108"
STRAIGHT WIDTH	136.25"	160.25"
PUSHER WIDTH	109"	133"
BACK DRAG WIDTH	99.75"	123.75"
WINDROW WIDTH	76.25" - 97.25" @ 30°	96.75" - 117.75" @ 30°
BLADE ANGLE	±30°	±30°
MOLDBOARD HEIGHT	32.75"	32.75"
HEIGHT WITH SPILL GUARD	43.25"	43.25"
HEIGHT WITH MARKERS	50.88"	50.88"
MOUNT FLOTATION	10° UP, 5° DOWN	10° UP, 5° DOWN
MOUNT OSCILLATION	±5°	±5°
CUTTING EDGE	1/2" X 6" BOLT-ON	1/2" X 6" BOLT-ON
TRIP TYPE	TRIP EDGE	TRIP EDGE
NUMBER OF TRIP SPRINGS	4	4
OPERATING WEIGHT	1,385 LBS.	1,485 LBS.



LIMITED WARRANTY

Erskine Attachments, LLC warrants each new machine manufactured by us to be free from defects in material and workmanship for a period of twenty-four (24) months from date of delivery to the original purchaser.

Our obligation under this warranty is to replace free of charge, at our factory or authorized dealership, any part proven defective within the stated warranty time limit.

All parts must be returned freight prepaid and adequately packaged to prevent damage in transit.

This warranty does not cover:

1. New products which have been operated in excess of rated capacities or negligence
2. Misuse, abuse, accidents or damage due to improperly routed hoses
3. Machines which have been altered, modified or repaired in any manner not authorized by our company
4. Previously owned equipment
5. Any ground engaging tools in which natural wear is involved, i.e. tooth tips, cutting teeth, etc
6. Normal maintenance
7. Fork tines
8. Hydraulic motors that have been disassembled in any manner

In no event will the Sales Representative, Dealership, Erskine Attachments, LLC, or any other company affiliated with it or them be liable for incidental or consequential damages or injuries, including but not limited to the loss of profit, rental or substitute equipment or other commercial loss. Purchaser's sole and exclusive remedy being as provided here in above.

Erskine Attachments, LLC must receive immediate notification of defect and no allowance will be made for repairs without our consent or approval.

This warranty is in lieu of all other warranties, express or implied by law or otherwise, and there is no warranty of merchantability or fitness purpose.

No agent, employee, or representative of Erskine Attachments, LLC has any authority to bind Erskine Attachments, LLC to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms apply.

This warranty may not be enlarged or modified in any manner except in writing signed by an executive officer of Erskine Attachments, LLC to improve its products whenever it is possible and practical to do so. Erskine Attachments, LLC reserves the right to make changes and or add improvements at any time without incurring any obligation to make such changes or add such improvements to products previously sold.

Erskine Attachments, LLC
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ATTACHMENTS